

Supplemental Material

Table 1

Genes identified by rank product analysis to be significantly altered by the As exposure are listed for each exposure: 100 ppb As in the drinking water, 10 ppb As in the drinking water and 10 ppb As in the food.

Affymetrix probe ID, gene symbol(s), entrez gene ID(s) and the log ratio change are detailed for each gene at each exposure.

Table 2:

Genome-wide transcriptome microarrays were run as described in Methods for animals exposed to arsenic as indicated in the heatmap represented in Figure 3A. The ANOVA function of R was used to generate a list of the differentially regulated genes. A comprehensive list of genes known to have a function in the immune response was intersected with a list of the top 5 percent of genes identified by ANOVA. The list of Affymetrix probe ID and gene symbols corresponding to the heatmap represented in Fig 3A are listed in this table.

Table 3:

The ANOVA function of R was used to create a list of the differentially regulated genes. A comprehensive list of genes known to have a function in the cellular migration was created using Affymetrix NETAFFX. This list was intersected with a list of the top 20 percent of genes identified by ANOVA. The list of Affymetrix probe IDs and gene symbols corresponding to the heatmap represented in Fig 4 are listed in this table.

Table 4:

This legend provides a key for the shapes and symbols represented in the Ingenuity network analysis (Fig 2).

Supplemental Table 1

**Rank Product p-value 0.05****100 ppb Arsenic drinking water exposure compared to Controls**

Affymetrix Probe ID	Gene Symbol	Entrez Gene	Log Ratio Change
1418722_at	Ngp	18054	2.824
	LOC100039008 ///	100039008 ///	
	LOC100039054 ///	100039054 ///	
	LOC100039089 ///	100039089 ///	
	LOC100039116 ///	100039116 ///	
	LOC100039150 ///	100039150 ///	
	LOC100039247 ///	100039247 ///	
	LOC100041658 ///	100041658 ///	
	LOC100041687 ///	100041687 ///	
	LOC100048883 ///	100048883 ///	
	LOC100048885 ///	100048885 ///	
1420465_s_at	Mup1 /// Mup2	17840 /// 17841	2.732
1419532_at	Il1r2	16178	2.419
1449366_at	Mmp8	17394	2.369
1450826_a_at	Saa3	20210	2.141
1424509_at	Cd177	68891	1.947
1419691_at	Camp	12796	1.936
1440865_at	Ifitm6	213002	1.867
1419075_s_at	Saa1	20208	1.742
1450009_at	Ltf	17002	1.627
	LOC100046946 ///	100046946 ///	
1448680_at	Serpina1c	20702	1.562
1418282_x_at	Serpina1b	20701	1.537
1448291_at	Mmp9	17395	1.339
1428942_at	Mt2	17750	1.318
1449184_at	Pglyrp1	21946	1.308
1450788_at	Saa1	20208	1.222
1426328_a_at	Scn3b	235281	-0.843
	LOC100044050 ///	100044050 ///	
	LOC100044051 ///	100044051 ///	
	LOC100044094 ///	100044094 ///	
	LOC100044314 ///	100044314 ///	
	LOC100044314 ///	22445 /// 22446 ///	
1420357_s_at	Xlr3a /// Xlr3b /// Xlr3c	574437	-0.905
1435357_at	D4Wsu53e	27981	-0.978
1418489_a_at	Calcr1	54598	-1.073
1431724_a_at	P2ry12	70839	-1.084
1435043_at	Plcb1	18795	-1.088
1415824_at	Scd2	20250	-1.133
1450105_at	Adam10	11487	-1.139
1438532_at	Hmcn1	545370	-1.143
1427489_at	Itga8	241226	-1.182
1450625_at	Col5a2	12832	-1.185

1439204_at	Scn3a	20269	-1.186
1423537_at	Gap43	14432	-1.208
1438027_at	---	---	-1.218
1425050_at	Isoc1	66307	-1.221
1425582_a_at	Emcn	59308	-1.245
1440837_at	H2-Ob	15002	-1.245
1427495_at	Scn7a	20272	-1.258
1444086_at	E030049G20Rik	210356	-1.273
1434106_at	Epm2aip1	77781	-1.28
1426906_at	Ifi203	15950	-1.292
1425436_x_at	Klra10 /// Klra3 /// Klra9	16628 /// 16634 /// 16640	-1.294
1438651_a_at	Agtrl1	23796	-1.316
1460465_at	A930038C07Rik	68169	-1.32
1436920_at	Pcdh17	219228	-1.323
1455530_at	Ighv14-2	668421	-1.33
1423037_at	Agtrl1	23796	-1.331
1456111_at	D930028F11Rik	244853	-1.334
1423226_at	Ms4a1	12482	-1.34
1447927_at	LOC626578 /// Mpa2l	100702 /// 626578	-1.362
1422748_at	Zeb2	24136	-1.378
1451285_at	Fus	233908	-1.381
1450757_at	Cdh11	12552	-1.389
1429809_at	Tmtc2	278279	-1.47
1448538_a_at	D4Wsu53e	27981	-1.487
1430642_at	2900001G08Rik	76950	-1.526
1428719_at	2010309G21Rik	70018	-1.626
1449399_a_at	Il1b	16176	-1.709
1435767_at	Scn3b	235281	-1.853

## Rank Product p-value 0.05

### 10 ppb Arsenic drinking water exposure compared to Controls

Affymetrix Probe ID	Gene Symbol	Entrez Gene	Log Ratio Change
1418197_at	Ucp1	22227	3.058
1422651_at	Adipoq	11450	2.741
1424737_at	Thrsp	21835	2.667
1456062_at	Nppa	230899	2.518
1422973_a_at	Thrsp	21835	2.482
1451371_at	Mrap	77037	2.454
1424631_a_at	Ighg	380794	2.396
1425385_a_at	LOC100047788	100047788	2.395
1417867_at	Cfd	11537	2.213
1449434_at	Car3	12350	2.131
1460256_at	Car3	12350	2.114
1420347_at	Plunc	18843	2.043
1448872_at	Reg3g	19695	1.8
1439423_x_at	U46068	228801	1.64
1423719_at	LOC632073 /// U46068	228801 /// 632073	1.592
1431225_at	Sox11	20666	-0.602
1424998_at	Emr4	52614	-0.614
1450188_s_at	Lipg	16891	-0.671
1460259_s_at	Clca1 /// Clca2	12722 /// 80797	-0.68
1458464_at	Hecw2	329152	-0.696
1450136_at	Cd38	12494	-0.705
1453125_at	Sox11	20666	-0.721
1460290_at	Lpin2	64898	-0.723
1436530_at	OTTMUSG00000000971	100034251	-0.732
1450750_a_at	Nr4a2	18227	-0.739
1436612_at	2410004I01Rik	69739	-0.741
1449453_at	Bst1	12182	-0.741
1420924_at	Timp2	21858	-0.742
1422640_at	Pcdhb9	93880	-0.742
1432750_at	Zfp711	245595	-0.745
1419587_s_at	Rp2h	19889	-0.748
1421977_at	Mmp19	58223	-0.75
1432304_a_at	9030624J02Rik	71517	-0.751
1434877_at	Nptx1	18164	-0.758
1427994_at	Cd300lf /// LOC100047115	100047115 /// 246746	-0.763
1432217_a_at	Wdr16	71860	-0.765
1433804_at	Jak1	16451	-0.765
1427320_at	Copg2as2	54158	-0.772
1455150_at	---	---	-0.776
1422168_a_at	Bdnf	12064	-0.777
1427831_s_at	Zfp260	26466	-0.78
1431261_at	Clic5	224796	-0.782
1451733_at	Gcnt2	14538	-0.783
1421134_at	Areg	11839	-0.784

1436626_at	Tspan11	68498	-0.785
1452521_a_at	Plaur	18793	-0.788
1421008_at	Rsad2	58185	-0.79
1457065_at	Upk1b	22268	-0.791
1416505_at	Nr4a1	15370	-0.793
1423523_at	Aass	30956	-0.799
1440865_at	Ifitm6	213002	-0.803
1439109_at	Ccdc68	381175	-0.804
1454005_at	Fmo2	55990	-0.805
1451858_at	LOC668727 /// Mrgpra2	235712 /// 668727	-0.806
1440739_at	Vegfc	22341	-0.808
1426243_at	Cth	107869	-0.809
1452352_at	Ctla2b	13025	-0.81
1418480_at	Ppbp	57349	-0.811
1449991_at	Cd244 /// LOC677008	18106 /// 677008	-0.811
1452332_at	Ccdc85a	216613	-0.815
1448117_at	Kitl	17311	-0.816
1453920_a_at	Mospd2	76763	-0.816
1450004_at	Tslp	53603	-0.817
1419532_at	Il1r2	16178	-0.819
1460440_at	Lphn3	319387	-0.819
1448377_at	Slpi	20568	-0.82
1459679_s_at	Myo1b	17912	-0.82
1418596_at	Fgfr4	14186	-0.823
1448538_a_at	D4Wsu53e	27981	-0.824
1451241_at	Lamb1-1	16777	-0.825
1450512_at	Ntn4	57764	-0.827
1449037_at	Crem	12916	-0.828
1452001_at	Nfe2	18022	-0.829
1416959_at	Nr1d2	353187	-0.83
1427495_at	Scn7a	20272	-0.834
1448025_at	LOC100038947 /// LOC668101 /// Sirpb1	100038947 /// 320832 /// 668101	-0.835
1423281_at	Stmn2	20257	-0.836
1426314_at	Ednrb	13618	-0.837
1418156_at	Kcne4	57814	-0.839
1433610_at	AA986860	212439	-0.839
1438661_a_at	Arf2	11841	-0.84
1420136_a_at	---	---	-0.841
1429520_a_at	Phca	66190	-0.841
1419599_s_at	Ms4a6d	68774	-0.842
1436952_at	2310051E17Rik /// Klf9	16601 /// 70273	-0.843
1421866_at	Nr3c1	14815	-0.844
1427123_s_at	Copg2as2	54158	-0.844
1419080_at	Gdnf	14573	-0.847
1445882_at	Cd300lb	217304	-0.847
1450032_at	Slco2a1	24059	-0.847
1460271_at	Trem3	58218	-0.847
1422837_at	Scel	64929	-0.851

1449269_at	F5	14067	-0.851
1457440_at	Sstr4	20608	-0.852
1449901_a_at	Map3k6	53608	-0.858
1433481_at	Fkbp14	231997	-0.859
1449548_at	Efnb2	13642	-0.861
1415900_a_at	Kit	16590	-0.863
1422473_at	Pde4b	18578	-0.866
1423905_at	Pvr	52118	-0.869
1423594_a_at	Ednrb	13618	-0.87
1419098_at	Stom	13830	-0.872
1441776_at	Tspan11	68498	-0.872
1427167_at	Armcx4	102910	-0.874
1421811_at	LOC640441 /// Thbs1	21825 /// 640441	-0.875
1425530_a_at	Stx3	20908	-0.875
1448749_at	Plek	56193	-0.884
1425281_a_at	Tsc22d3	14605	-0.886
1427126_at	Hspa1b	15511	-0.886
1449856_at	Rgs18	64214	-0.886
1450808_at	Fpr1	14293	-0.887
1434203_at	BC055107	268709	-0.888
1452388_at	Hspa1a	193740	-0.89
1450377_at	LOC640441	640441	-0.895
1430838_x_at	Mbd1	17190	-0.896
1440845_at	E030031F02Rik	319689	-0.899
1417502_at	Tspan7	21912	-0.9
1423566_a_at	Hsp110	15505	-0.9
1448541_at	Klc1	16593	-0.904
1449851_at	Per1	18626	-0.904
1419598_at	Ms4a6d	68774	-0.905
1450224_at	Col4a3	12828	-0.907
1421184_a_at	Higd1c /// LOC554292 /// Mettl7a /// Ubie	380975 /// 393082 /// 554292 /// 70152	-0.909
1438227_at	She	214547	-0.91
1419616_at	Bmpr2	12168	-0.912
1421734_at	---	---	-0.913
1420503_at	Slc6a14	56774	-0.916
1432417_a_at	Tspan2	70747	-0.918
1452318_a_at	Hspa1b	15511	-0.918
1425368_a_at	Numb	18222	-0.919
1434484_at	1100001G20Rik	66107	-0.921
1422112_at	Ccbp2	59289	-0.924
1422243_at	Fgf7	14178	-0.927
1456080_a_at	Serinc3	26943	-0.928
1442339_at	Stfa2l1	268885	-0.931
1423598_at	Atp8a1	11980	-0.934
1418675_at	Osmr	18414	-0.939
1455104_at	Mxd1	17119	-0.942
1448482_at	Slc39a8	67547	-0.943

1426575_at	Sgms1	208449	-0.945
1417395_at	Klf4	16600	-0.946
1420394_s_at	Gp49a /// Lilrb4	14727 /// 14728	-0.946
1427127_x_at	Hspa1b	15511	-0.95
1438841_s_at	Arg2	11847	-0.95
1425958_at	Il1f9	215257	-0.952
1421832_at	Twsg1	65960	-0.954
1417401_at	Rai14	75646	-0.955
1460601_at	Myrip	245049	-0.956
1450113_at	Mpp5	56217	-0.957
1417396_at	Podxl	27205	-0.967
1420464_s_at	Lilrb3 /// LOC100038908 /// LOC100038909 /// LOC100041137 /// LOC100041146 /// LOC100044531 /// LOC675749 /// Pira1 /// Pira11 /// Pira2 /// Pira3 /// Pira4 /// Pira6	100038908 /// 100038909 /// 100041137 /// 100041146 /// 100044531 /// 18722 /// 18724 /// 18725 /// 18726 /// 18727 /// 18729 /// 18733 /// 675749	-0.972
1445860_at	Tspan11	68498	-0.973
1455034_at	Nr4a2	18227	-0.973
1460129_at	Slc6a2	20538	-0.973
1422953_at	Fpr-rs2	14289	-0.974
1448024_at	Npr3	18162	-0.974
1421282_at	Bmp5	12160	-0.978
1417263_at	Ptgs2	19225	-0.981
1419561_at	Ccl3	20302	-0.984
1426433_at	Myct1	68632	-0.988
1449363_at	Atf3	11910	-0.988
1418985_at	Cttnbp2nl	80281	-0.992
1427381_at	Irg1	16365	-0.995
1431724_a_at	P2ry12	70839	-0.996
1419099_x_at	Stom	13830	-0.997
1420696_at	Sema3c	20348	-0.998
1419394_s_at	S100a8	20201	-1.009
1424341_s_at	Pcdha1 /// Pcdha10 /// Pcdha11 /// Pcdha12 /// Pcdha2 /// Pcdha3 /// Pcdha5 /// Pcdha6 /// Pcdha7 /// Pcdha8 /// Pcdha9 /// Pcdhac1 /// Pcdhac2	116731 /// 12937 /// 12939 /// 12941 /// 12942 /// 12943 /// 192161 /// 192163 /// 192164 /// 353234 /// 353235 /// 353236 /// 353237	-1.009
1419816_s_at	Errfi1	74155	-1.013

1422978_at	Cybb	13058	-1.014
1449865_at	LOC100044161 /// Sema3a	100044161 /// 20346	-1.018
1427414_at	Prkar2a	19087	-1.02
1439151_at	Msrb3	320183	-1.021
1449984_at	Cxcl2	20310	-1.022
1451843_a_at	Ggta1	14594	-1.024
1431030_a_at	Rnf14	56736	-1.025
1422046_at	Itgam	16409	-1.026
1425471_x_at	---	---	-1.031
1450286_at	Npr3	18162	-1.034
1427489_at	Itga8	241226	-1.036
1449885_at	Tmem47	192216	-1.04
1419691_at	Camp	12796	-1.045
1421441_at	Angpt1	11600	-1.049
1420398_at	Rgs18	64214	-1.051
1423016_a_at	Gypa	14934	-1.053
1428776_at	Slc10a6	75750	-1.053
1449862_a_at	Pi4k2b	67073	-1.054
1451691_at	Ednra	13617	-1.065
1451846_at	Nebi	74103	-1.066
1433492_at	Epb4.1l2	13822	-1.067
1425470_at	---	---	-1.074
1437476_at	Rrm2b	382985	-1.078
1434202_a_at	BC055107	268709	-1.107
1430452_at	Cyp20a1	77951	-1.12
1418489_a_at	Calcrl	54598	-1.13
1420411_a_at	Pi4k2b	67073	-1.153
1419161_a_at	Nox4	50490	-1.162
1421415_s_at	Gcnt2	14538	-1.165
1435184_at	Npr3	18162	-1.172
1426519_at	P4ha1	18451	-1.177
1421187_at	Ccr2	12772	-1.182
1448756_at	S100a9	20202	-1.186
1442025_a_at	AI467657	102538	-1.204
1418806_at	Csf3r	12986	-1.244
1460302_at	LOC640441 /// Thbs1	21825 /// 640441	-1.258
1438796_at	Nr4a3	18124	-1.266
1418847_at	Arg2	11847	-1.299
1425644_at	Lepr	16847	-1.299
1419609_at	Ccr1	12768	-1.336
1447284_at	Trem1	58217	-1.393
1439163_at	Zbtb16	235320	-1.425
1449366_at	Mmp8	17394	-1.507
1420804_s_at	Clec4d	17474	-1.527
1420330_at	Clec4e	56619	-1.604
1449399_a_at	Il1b	16176	-1.617
1418722_at	Ngp	18054	-1.667
1427102_at	Sifn4	20558	-1.847



# Rank Product p-value 0.05

## 10 ppb Arsenic in food exposure compared to Controls

Affymetrix Probe ID	Gene Symbol	Entrez Gene	Log Ratio Change
1420347_at	Plunc	18843	1.397
1417867_at	Cfd	11537	1.16
	LOC100039008 ///	100039008 ///	
	LOC100039054 ///	100039054 ///	
	LOC100039089 ///	100039089 ///	
	LOC100039116 ///	100039116 ///	
	LOC100039150 ///	100039150 ///	
	LOC100039247 ///	100039247 ///	
	LOC100041658 ///	100041658 ///	
	LOC100041687 ///	100041687 ///	
	LOC100048883 ///	100048883 ///	
	LOC100048885 /// Mup1 ///	100048885 /// 17840	
1420465_s_at	Mup2	/// 17841	0.989
1422651_at	Adipoq	11450	0.892
1425738_at	LOC100047222 ///LOC676193	100047222 ///676193	0.744
1423719_at	LOC632073 /// U46068	228801 /// 632073	0.699
1460256_at	Car3	12350	0.691
1421653_a_at	Igh /// Igh-2 ///	111507 /// 16061 ///	
	Igh-VJ558 /// LOC677563	238447 /// 677563	0.654
1439423_x_at	U46068	228801	0.627
1460011_at	Cyp26b1	232174	0.625
1449434_at	Car3	12350	0.617
1448872_at	Reg3g	19695	0.512
1460513_a_at	Ednra	13617	0.501
1418722_at	Ngp	18054	0.401
1456062_at	Nppa	230899	0.334
1422448_at	Tff2	21785	0.327
1418847_at	Arg2	11847	-0.502
1437595_at	E030010A14Rik	226040	-0.507
1442339_at	Stfa2l1	268885	-0.521
1427102_at	Slfn4	20558	-0.532
1438841_s_at	Arg2	11847	-0.547
1440868_at	Gabpb2	213054	-0.548
1441328_at	---	---	-0.559
1436343_at	Chd4	107932	-0.582
1425888_at	Klra17	170733	-0.587
1418806_at	Csf3r	12986	-0.589
1421907_at	Med1	19014	-0.599
1428223_at	Mfsd2	76574	-0.605
1438730_at	BC028801	408054	-0.612
1435521_at	Msi2	76626	-0.615
1449984_at	Cxcl2	20310	-0.619
1449366_at	Mmp8	17394	-0.626
1418095_at	Smpx	66106	-0.629

1436746_at	Wnk1	232341	-0.629
1422760_at	LOC100047347 /// Padi4	100047347 /// 18602	-0.634
1420804_s_at	Clec4d	17474	-0.641
1448803_at	Golga4	54214	-0.641
1449851_at	Per1	18626	-0.641
	BC003993 /// LOC100038980 /// LOC100039088 /// LOC100039101 /// LOC100039204 /// LOC100039404 /// LOC100040136 /// LOC100040620 /// LOC100040646 /// LOC100040656 /// LOC100040790 /// LOC100040936 /// LOC100041238 /// LOC100041416 /// LOC100042151 /// LOC100042341 /// LOC100042551 /// LOC100042613 /// LOC100042748 /// LOC100043165 /// LOC100043211 /// LOC100043316 /// LOC100043783 /// LOC100043829 /// LOC100043874 /// LOC100044588 /// LOC100046838 /// LOC100047346 /// LOC100047648 /// LOC100048186 /// LOC544818 1424609_a_at /// LOC671950	100038980 /// 100039088 /// 100039101 /// 100039204 /// 100039404 /// 100040136 /// 100040620 /// 100040646 /// 100040656 /// 100040790 /// 100040936 /// 100041238 /// 100041416 /// 100042151 /// 100042341 /// 100042551 /// 100042613 /// 100042748 /// 100043165 /// 100043211 /// 100043316 /// 100043783 /// 100043829 /// 100043874 /// 100044588 /// 100046838 /// 100047346 /// 100047648 /// 100048186 /// 544818 /// 671950 /// 80744	-0.644
1419497_at	Cdkn1b	12576	-0.646
1456505_at	Braf	109880	-0.65

	BC003993 /// LOC100038980 /// LOC100039088 /// LOC100039101 /// LOC100039204 /// LOC100039404 /// LOC100040136 /// LOC100040620 /// LOC100040646 /// LOC100040656 /// LOC100040790 /// LOC100040936 /// LOC100041238 /// LOC100041416 /// LOC100042151 /// LOC100042341 /// LOC100042551 /// LOC100042748 /// LOC100043165 /// LOC100043211 /// LOC100043316 /// LOC100043783 /// LOC100043829 /// LOC100043874 /// LOC100044588 /// LOC100047346 /// LOC100047648 /// LOC100048186 /// LOC544818 1424607_a_at /// LOC671950	100038980 /// 100039088 /// 100039101 /// 100039204 /// 100039404 /// 100040136 /// 100040620 /// 100040646 /// 100040656 /// 100040790 /// 100040936 /// 100041238 /// 100041416 /// 100042151 /// 100042341 /// 100042551 /// 100042748 /// 100043165 /// 100043211 /// 100043316 /// 100043783 /// 100043829 /// 100043874 /// 100044588 /// 100047346 /// 100047648 /// 100048186 /// 544818 /// 671950 /// 80744	-0.67
1455057_at	Gmps	229363	-0.698
1452416_at	Il6ra	16194	-0.699
1434202_a_at	BC055107	268709	-0.702
1427381_at	Irg1	16365	-0.707
1420330_at	Clec4e	56619	-0.718
1428936_at	Atp2b1	67972	-0.722
1419532_at	Il1r2	16178	-0.733
1441026_at	Parp4	328417	-0.749
1436898_at	LOC100045887 /// Sfpq	100045887 /// 71514	-0.779
1442026_at	Al467657	102538	-0.79
1419874_x_at	Zbtb16	235320	-0.793
1455998_at	LOC667118	667118	-0.794
1427564_at	Diap2	54004	-0.841
1416123_at	Ccnd2	12444	-0.855
1451718_at	Plp1	18823	-0.86
1457435_x_at	Myom2	17930	-0.89
1419038_a_at	Csnk2a1 /// LOC100039026	100039026 /// 12995	-0.907
1442025_a_at	Al467657	102538	-1.12
1439163_at	Zbtb16	235320	-1.518
1417464_at	Tnnc2	21925	-1.537

Supplemental Table 2:  
Immune response Genes

Affymetrix ID	Gene Symbol
1416051_at	C2
1416130_at	Prnp
1416456_a_at	Chia
1417263_at	Ptgs2
1417268_at	Cd14
1417776_at	Azgp1
1417789_at	Ccl11
1417936_at	Ccl9
1418652_at	Cxcl9
1418918_at	Igf1bp1
1419075_s_at	Saa2
1419100_at	Serpina3n
1419132_at	Tlr2
1419561_at	Ccl3
1419609_at	Ccr1
1419691_at	Camp
1419693_at	Colec12
1419848_x_at	Tlr7
1420089_at	Nfkbia
1420249_s_at	Ccl6
1420330_at	Clec4e
1420331_at	Clec4e
1420378_at	Sftpd
1420380_at	Ccl2
1420394_s_at	Lilrb4
1420412_at	Tnfsf10
1420437_at	Indo
1421296_at	Tnfrsf10b
1421370_a_at	Il1f5
1421376_at	Traf6
1421596_s_at	H28
1421655_a_at	Ccr4
1421866_at	Nr3c1
1421898_a_at	Mr1
1421899_a_at	Mr1
1422416_s_at	Vpreb2
1423017_a_at	Il1rn
1423048_a_at	Tollip
1423400_at	Kl
1424041_s_at	C1s
1424305_at	Igj
1425385_a_at	Igh-6
1425406_at	Clec4a2
1425761_a_at	Nfatc1
1426202_at	H2-Ea
1427429_at	Csf2

1427576_at	Igkv1-135
1427859_at	Igk-V19-14
1428012_at	C8a
1428260_at	Spg3a
1428942_at	Mt2
1435477_s_at	Fcgr2b
1438767_at	Osm
1439718_at	Ada
1441292_at	OTTMUSG000000005523
1441912_x_at	C2
1446977_at	Traf6
1448620_at	Fcgr3
1448756_at	S100a9
1448881_at	Hp
1448898_at	Ccl9
1449130_at	Cd1d1
1449131_s_at	Cd1d1
1449254_at	Spp1
1449308_at	C6
1449521_at	Cd93
1449882_a_at	Casr
1449984_at	Cxcl2
1450495_a_at	Klrk1
1450723_at	Isl1
1450788_at	Saa1
1450957_a_at	Sqstm1
1451314_a_at	Vcam1
1451664_x_at	Klra7
1451877_at	Eda
1452486_a_at	Cryaa
1453389_a_at	Sh2b2
1455332_x_at	Fcgr2b
1457644_s_at	Cxcl1
1457753_at	Tlr13
1457769_at	Aco2

Supplemental Table 3:  
Cell Adhesion and Migration Genes

Affymetrix ID	Gene Symbol
1416034_at	Cd24a
1416156_at	Vcl
1416157_at	Vcl
1416786_at	Acvr1
1416797_at	Nck2
1417574_at	Cxcl12
1417694_at	Gab1
1418286_a_at	Efnb1
1418376_at	Fgf15
1418661_at	Abhd2
1419080_at	Gdnf
1419232_a_at	Apoa1
1419233_x_at	Apoa1
1420337_at	Gbx2
1420696_at	Sema3c
1420785_at	Gab2
1420893_a_at	Tgfbr1
1420894_at	Tgfbr1
1420906_at	Cd2ap
1420908_at	Cd2ap
1420909_at	Vegfa
1421287_a_at	Pecam1
1422556_at	Gna13
1423135_at	Thy1
1423392_at	Clic4
1423571_at	Edg1
1423594_a_at	Ednrb
1423734_at	Rac1
1423903_at	Pvr
1423904_a_at	Pvr
1423905_at	Pvr
1424543_at	Nck1
1424807_at	Lama4
1424850_at	Map3k1
1425514_at	Pik3r1
1425515_at	Pik3r1
1425695_at	Tbx5
1426152_a_at	Kitl
1426285_at	Lama2
1426314_at	Ednrb
1427308_at	Dab1
1427615_at	Itga4
1430295_at	Gna13
1430827_a_at	Ptk2
1433749_at	Gna13
1435382_at	Ndn

















1436037_at	Itga4
1437224_at	Rtn4
1437378_x_at	Scarb1
1438606_a_at	Clic4
1438696_at	Edn3
1438840_x_at	Apoa1
1438939_x_at	Ndn
1439084_at	Cxcl12
1440926_at	Flt1
1441057_at	Myh10
1441923_s_at	Edn3
1442215_at	Smo
1445149_at	Pvr
1446191_at	Abi3
1448117_at	Kitl
1448150_at	Nup62
1448183_a_at	Hif1a
1448460_at	Acvr1
1448535_at	Elp4
1448649_at	Enpep
1448710_at	Cxcr4
1448814_at	Gab1
1448823_at	Cxcl12
1448914_a_at	Csf1
1449379_at	Kdr
1450155_at	Itga4
1450295_s_at	Pvr
1450674_at	Cdk5
1450723_at	Isl1
1450873_at	Gtpbp4
1450989_at	Tdgf1
1451241_at	Lamb1-1
1451428_x_at	Egfl7
1451463_at	Arhgap8
1451959_a_at	Vegfa
1452196_a_at	Nckap1
1453470_a_at	Gna13
1454037_a_at	Flt1
1454890_at	Amot
1455201_x_at	Apoa1
1455792_x_at	Ndn
1460067_at	Ccr2
1460319_at	Fut8

## Legend

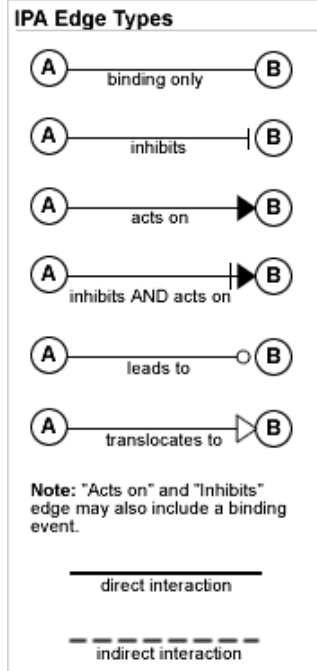
This legend provides an key of the main features of Network Explorer and Canonical Pathways, including node shapes and colors as well as edge labels and types.

### Node Shapes

#### IPA Node Types

-  Chemical or Drug
-  Cytokine
-  Enzyme
-  G-protein Coupled Receptor
-  Group or Complex
-  Growth Factor
-  Ion Channel
-  Kinase
-  Ligand-dependent Nuclear Receptor
-  Peptidase
-  Phosphatase
-  Transcription Regulator
-  Translation Regulator
-  Transmembrane Receptor
-  Transporter
-  Other

### Edges Types



**Bold** Network/ Functions Eligible Genes.

***Italics*** Override gene - user input gene designated as Override in the dataset file.

**\*** Duplicate - user input gene that had duplicate identifiers in the dataset file mapping to a single gene in the IPKB.

**+** Indicates there are other networks from the analysis that contain this gene. Right click on the + sign or on the corresponding node to view the related networks.

**Δ** Nodes marked with the Δ (delta) have undergone a change from a previous content release. Changes include: (1) the merging of two or more nodes into one (2) the split of one node into two or more nodes (3) the deletion of an obsolete node name.

**†** The † (dagger) symbol indicates custom nodes.



## **Edge Labels**

**A Activation**  
**B Binding**  
**C Causes/Leads to**  
**CC Chemical-Chemical interaction**  
**CP Chemical-Protein interaction**  
**E Expression**  
**EC Enzyme Catalysis**  
**I Inhibition**  
**L ProteoLysis**  
**LO Localization**  
**M Biochemical Modification**  
**MB Group/complex Membership**  
**P**  
**Phosphorylation/Dephosphorylation**  
**PD Protein-DNA binding**  
**PP Protein-Protein binding**  
**PR Protein-RNA binding**  
**RB Regulation of Binding**  
**RE Reaction**  
**T Translocation**  
**TR Transcription**